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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/552,360

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EXAMINER

TOLIN, MICHAEL A

ART UNIT

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1791

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/552,360	Applicant(s) GIACOMETTI, CLAUDIO	
	Examiner MICHAEL A. TOLIN	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 15-18 and 25-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 19-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10-3-05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I and Species I-a, in the reply filed on 26 January 2009 is acknowledged. The traversal is not persuasive for the reasons provided below.

The requirement is still deemed proper and is therefore made FINAL.

Applicant argues the groups identified in the restriction requirement are linked by a special technical feature. It is noted that a common technical feature only constitutes a special technical feature if the common technical feature defines a contribution over the prior art. For the reasons set forth in the rejections below, the common technical feature between the claimed method and the claimed production line does not define a contribution over the prior art. Accordingly, a special technical feature is lacking between the method and the production line and restriction is considered proper. Similarly, the identified species also lack a special technical feature for the reasons set forth in the rejections below.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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3. Claims 20 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 20, there is no antecedent basis for "said heating station". The examiner suggests adding language to introduce the heating station.

Regarding claim 23, there is no antecedent basis for "said web of unconsolidated fibers". The examiner suggests adding language to introduce the web of unconsolidated fibers.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-5, 19, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giacometti (US 5709829) in view of any one of Muth (WO 03/004229 A1 referencing US 2004/0209041 as an English-language equivalent), Schulz (US 5913997) or Cruise (US 5874159).

Giacometti teaches a method of producing a perforated web material wherein the web material is fed through a nip between a first roller 7 and a second roller 5 rotating in

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opposite directions and pressed against each other (Figure 1; column 2, lines 52-64), the first roller being provided with protuberances for perforation (column 1, lines 60-67).

Giacometti differs from claim 1 in that Giacometti does not recite the claimed step of preheating. However, such a step of preheating prior to thermal treatment between opposed rolls is generally known in the art. For example, Muth teaches preheating on a heated roll 5 prior to perforation between heated rolls in order to achieve especially stable perforation (paragraphs 29, 30 and 41; Figure 1). Schulz teaches preheating prior to thermomechanical treatment of a web in order to achieve very uniform treatment, provide increased flexibility in processing conditions at various line speeds and web materials, optimize the thermomechanical treatment, and to provide precise temperature control prior to the thermomechanical treatment (column 2). Schulz also indicates that the thermomechanical treatment may include processing the preheated web material between heated rolls (column 3, lines 25-31). Cruise teaches that preheating prior to calendering between rolls allows an increase in manufacturing speed because the opposed rolls do not have to heat the fabric as much (column 5, lines 64-67; column 6, lines 1-8). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide Giacometti with the claim step of preheating because one of ordinary skill in the art would have been motivated to achieve any of the above noted benefits in accordance with the teachings of any one of Muth, Schulz, or Cruise.

The limitations of claims 2-5 are clearly satisfied by Giacometti (Abstract; column 1, lines 60-67; column 2, lines 13-27 and 40-51; column 4, lines 33-39).

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The limitations of claim 19, 23 and 24 are clearly taught by Giacometti (column 2, lines 13-27).

6. Claims 6 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giacometti in view of any one of Muth, Schulz or Cruise as applied to claims 1-5, 19, 23 and 24 above, and further in view of Dettmer (WO 99/25911 referencing US 6395211 as an English-language equivalent).

Regarding claim 6, Giacometti does not recite that the web material is bonded prior to being fed into the nip. Dettmer teaches that pre-bonding prior to feeding a nonwoven web into a nip for providing apertures in the web is advantageous in that the fibers are held together and do not prematurely or individually come into contact with the embossing roller which produces perforations (column 2, lines 58-60; column 3, lines 12-15). As to providing a bonded nonwoven fabric by using the claimed steps of producing a web of fibers and bonding the fibers, such is a conventional method of forming a bonded nonwoven fabric. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the claimed steps of producing and bonding because one of ordinary skill in the art would have been motivated to achieve the above noted benefits taught by Dettmer when using a bonded web and one of ordinary skill in the art would have been motivated to provide such a bonded web by conventional methods known in the art.

The limitation of claim 10 is clearly taught by Giacometti (column 1, lines and 65-67).

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Regarding claims 12 and 13, Giacometti indicates that the speed of the web material may be equal to the peripheral speed of the second roller (column 6, lines 20-23). Giacometti further teaches that the peripheral speed of the first roller should be varied to suit to base material being used and may be as low as 10% higher than the second roller, corresponding to a feed speed of about 90% of the peripheral speed of the first roller (column 2, lines 52-64). Accordingly, the ranges suggested by Giacometti appear to satisfy the claimed ranges. In any event, Giacometti teaches varying the rate of slipping to achieve suitable results. In particular, Giacometti seeks to provide perforations which promote liquid travel in a single direction (column 1, lines 41-47; column 2, lines 1-12). Thus it appears that no more than routine experimentation is involved in selecting the peripheral speed of the first roller to achieve the desired perforation characteristics. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the limitations of claims 12 and 13 because one of ordinary skill in the art would have been motivated to adjust the peripheral speed of the first roller to achieve the perforation characteristics taught by Giacometti as a matter of routine experimentation in view of the rate of slipping ranges taught by Giacometti.

The limitations of claims 11 and 14 have been satisfied for the reasons provided above.

7. Claims 7-9 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giacometti in view of any one of Muth, Schulz or Cruise, and further in view of

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Dettmer as applied to claims 6 and 10-14 above, and further in view of Pike (US 5382400).

Regarding claim 7, while Giacometti shows a web material being unwound from a roll, it is also old and well known in the art that in-line production of a nonwoven material is an alternative suitable method of providing the web material. For example, Pike explains that web materials may be preformed and provided to a manufacturing process or they may be manufactured in-line using web formation and bonding stations (column 10, lines 36-57; Figure 1). One of ordinary skill in the art would have readily appreciated that the in-line method eliminates the steps of winding the web material and subsequently unwinding it to feed the web to a perforating station. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the limitation of claim 7 because one of ordinary skill in the art would have been motivated to provide the web material in any suitable known manner such as the well known in-line method evidenced by Pike.

Regarding claims 8 and 9, Pike suggests a heating and bonding station using a through-air system in order to provide suitable bonding as well as to provide a more lofty web (column 4, lines 34-48; column 8, lines 25-30). As set forth in the rejection of claims 6 and 10-14 above, Dettmer provides motivation to use a bonded web in a process of forming perforations in a web by feeding between rollers. Since Dettmer does not recite particular methods of bonding, one of ordinary skill in the art would have been motivated to look to the prior art for known methods of forming a bonded web. It would have been obvious to one of ordinary skill in the art at the time of the invention to

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provide the limitations of claims 8 and 9 because one of ordinary skill in the art would have been motivated to provide the bonded web suggested by Dettmer using suitable known methods as evidenced by Pike, or because one of ordinary skill in the art would have been motivated to achieve the lofty characteristics in forming a bonded web by through-air bonding in accordance with the teachings of Pike.

Regarding claim 20, Pike recognizes that unbonded nonwoven webs may be combined and subsequently laminated (column 10, lines 36-57). Performing such lamination in a heating station, for example by point bonding or through-air bonding, is well known in the art. As noted above, the primary reference to Giacometti suggests the use of composite nonwoven webs (column 2, lines 13-27). Further, as noted above, Dettmer suggests the use of a pre-bonded web prior to perforation between rollers in order to hold fibers together and prevent them from coming into contact with a roller surface prematurely. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the limitation of claim 20 because one of ordinary skill in the art would have been motivated to provide a bonded web material to achieve the above noted advantages in accordance with the teachings of Dettmer using known suitable methods of providing such a bonded web in accordance with the teachings of Pike and well known heated lamination methods for forming bonded nonwoven composite fabrics.

Regarding claim 21, Pike recognizes that unbonded or pre-bonded nonwoven fabric webs may be combined and laminated (column 10, lines 36-57). As noted above, Dettmer suggests the use of a pre-bonded web prior to perforation between rollers in

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order to hold fibers together and prevent them from coming into contact with a roller surface prematurely. It is also generally well known in the art of processing nonwoven fabrics that such fabrics may be subjected to a relatively light thermal point bonding operation in order to provide the fabrics with sufficient integrity for subsequent processing. As noted above with respect to claim 19, Giacometti clearly teaches combining nonwoven fabrics together in the perforating operation (column 2, lines 13-27). Furthermore, there is a very limited number of options when combining nonwoven webs, i.e. neither, one or both of the webs are pre-bonded. Accordingly, in view of Pike's recognition that pre-bonded or unbonded webs may be combined, Dettmer's suggestion to use a pre-bonded web, and the generally well known use of thermal point bonding to provide nonwoven webs with integrity for further processing, the examiner's position is that no more than routine experimentation is required to select from such a limited number of possible options in order to suitably join and perforate the nonwoven fabrics as suggested by the primary reference to Giacometti. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the claimed forming, feeding and perforating steps of claim 21 because one of ordinary skill in the art would have been motivated to pre-bond the nonwoven webs suggested by Giacometti in accordance with the above noted teachings of Dettmer, in order to provide the webs with integrity in accordance with well known methods, or as a matter of routine experimentation to achieve suitable lamination and perforation in view of the limited number of possible combinations and Pike's teaching that either unbonded or pre-bonded nonwoven webs may be combined.

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Regarding claim 22, Pike suggests the use of bicomponent fibers in order to allow production of a lofty fabric useful in absorbent articles as a liner material, and also to allow suitable bonding by a through-air method (column 9, lines 10-64; column 4, lines 34-47). The primary reference to Giacometti is also directed to a liner material for absorbent articles (column 5, lines 40-58). It would have been obvious to one of ordinary skill in the art at the time of the invention to use bicomponent fibers in the web material because one of ordinary skill in the art would have been motivated to achieve the above noted benefits in accordance with the teachings of Pike.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL A. TOLIN whose telephone number is (571)272-8633. The examiner can normally be reached on M-F 9am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael A Tolin/
Examiner, Art Unit 1791